

Claims

- [c1] A border assembly for a mattress or bedding material, said assembly comprising:
 - a first side rail,
 - a first end rail pivotably attached to said first side rail,
 - a second side rail pivotably attached to said first end rail,
 - and
 - a second end rail pivotably attached to said second side rail and said first side rail, wherein said side rails and said end rails form a collapsible border assembly.
- [c2] The border assembly according to claim 1, wherein said first and second side rails and said first and second end rails comprise polyurethane foam.
- [c3] The border assembly according to claim 2, wherein pivotable attachment between the first end rail and first side rail is by a hinge.
- [c4] The border assembly according to claim 2, wherein pivotable attachment between the second side rail and the first end rail is by a hinge.
- [c5] The border assembly according to claim 3, wherein said hinge is formed from a material selected from the group

consisting of adhesive tape, plastic, and polyurethane foam.

[c6] The border assembly according to claim 2, wherein pivotable attachment between the first end rail and first side rail is by a hinge formed by retaining a portion of foam material between said first end rail and said first side rail when cutting a mitered end wall in each of said rails.

[c7] A border assembly for a mattress or other bedding material, said assembly comprising:
a first foam side rail having a top wall, a bottom wall, an outer side wall, an inner side wall, a mitered end wall, and a square end wall;
a first foam end rail having a top wall, a bottom wall, an outer side wall, an inner side wall, a square end wall, and a mitered end wall, wherein said mitered end wall of said first foam end rail is pivotably attached to said mitered end wall of said first foam side rail, thereby forming a mitered corner joint;
a second foam side rail having a top wall, a bottom wall, an outer side wall, an inner side wall, a mitered end wall, and a square end wall, wherein said square end wall is pivotably attached to a portion of said inner side wall of said first end rail, thereby forming a joint; and
a second foam end rail having a top wall, a bottom wall,

an outer side wall, an inner side wall, a square end wall, and a mitered end wall, wherein said mitered end wall of said second foam end rail is pivotably attached to said mitered end wall of said second foam side rail, thereby forming a mitered joint, and said square end wall of said second side rail is pivotably attached to a portion of said inner side wall of said second end rail, thereby forming a joint.

[c8] The border assembly according to claim 7, wherein said first and second foam side rails and said first and second foam end rails comprise polyurethane foam

[c9] The border assembly according to claim 7, wherein pivotable attachment between the first end rail and first side rail is by a hinge.

[c10] The border assembly according to claim 7, wherein pivotable attachment between the second side rail and the first end rail is by a hinge.

[c11] The border assembly according to claim 9, wherein said hinge is formed from a material selected from the group consisting of tape, plastic, and polyurethane foam.

[c12] A method of preparing a collapsible border assembly for pre-assembly into a mattress construction, comprising: forming a mitered end wall on a first side rail by cutting

said end wall at an angle of between about 30 to 60 degrees;
forming a mitered end wall on a first end rail by cutting said end wall at an angle of about 30 to 60 degrees;
forming a mitered end wall on a second side rail by cutting said end wall at an angle of about 30 to 60 degrees;
forming a mitered end wall on a second end rail by cutting said end wall at an angle of about 30 to 60 degrees;
pivotably attaching said first side rail to said first end rail at said respective mitered end walls, thereby forming a mitered corner joint;
pivotably attaching said mitered end wall of said second end rail to said mitered end wall of said second side rail, thereby forming a mitered corner joint;
pivotably attaching an end wall of the second side rail to a portion of an inner side wall of said first end rail, thereby forming a joint; and
pivotably attaching an end wall of the first side rail to a portion of an inner side wall of said second end rail, thereby forming a joint,
wherein the first end rail, first side rail, second end rail and second side rail together form the collapsible border assembly.

[c13] The method of claim 12, further comprising the step of: collapsing said collapsible border assembly by straight-

ening the mitered corner joints and bending the joints to place said side rails substantially in contact with said end rails.

- [c14] The method of claim 12, wherein the mitered end walls are each formed at an angle of about 45 degrees.
- [c15] A mattress assembly kit having component parts capable of being assembled at the mattress manufacturer's site, the kit comprising the combination of:
 - a mattress core section;
 - a collapsible border assembly having first and second side rails pivotably attached to first and second end rails, wherein said first and second side and end rails define a center opening to accommodate the mattress core section.
 - a top sheet for attaching to top walls of said first and second side rails and said first and second end rails; and
 - a bottom sheet for attaching to bottom walls of said first and second side rails and said first and second end rails.
- [c16] A mattress comprising the border assembly of claim 1.
- [c17] A mattress comprising the mattress assembly kit of claim 15.
- [c18] A method of making a mattress that incorporates a mattress border assembly, comprising:

expanding said collapsible border assembly having first side rails and second side rails pivotably attached to first end rails and second end rails, wherein said side rails and end rails define a center opening;

inserting a mattress core into said center opening, whereby said collapsible border assembly forms a perimeter frame around said mattress core;

attaching a top sheet onto top walls of said side rails and end rails;

attaching a bottom sheet onto bottom walls of said side rails and end rails;

encasing said mattress core, said collapsible border assembly, and said top and bottom sheets with a fabric or casing.